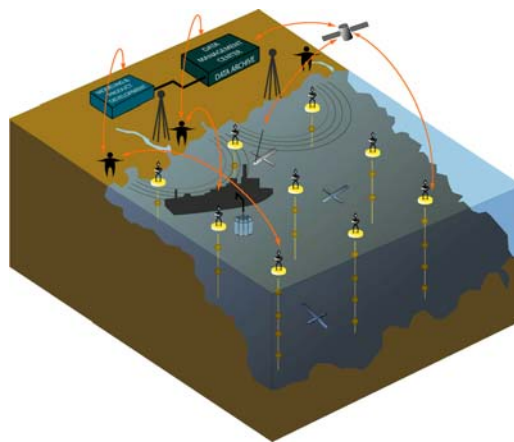


Ocean Observatories Initiative

and the

Ocean Research Interactive Observatory Networks (ORION) - Coastal Observatories.



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ORION

Operations and Maintenance

Science Funding

Instrumentation

Mobile Platforms

Educational Activities

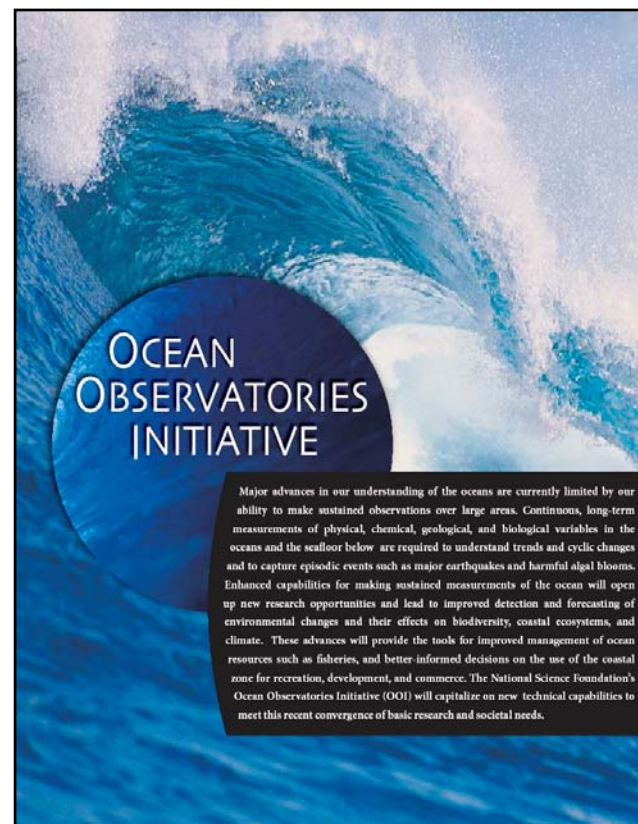
OOI

Construction and
Implementation Phase

Infrastructure
Technical Development
Project Management
Data Management
Core Instrumentation

Basic Infrastructure: a network providing high bandwidth communications and electrical power

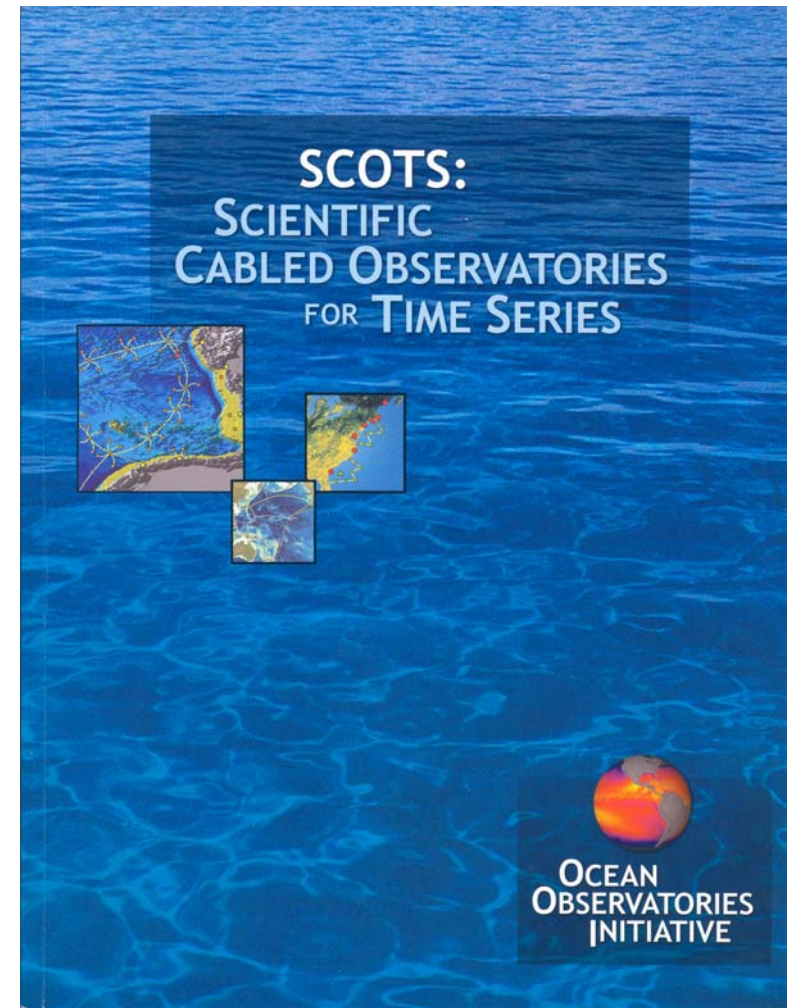
Three primary components:
Global-scale moored buoy systems
Regional-scale seafloor fiber optic cable system
Coastal observatories



SCOTS: Scientific Cabled Observatories for Time Series

Possible Science Themes Related to Ocean Color

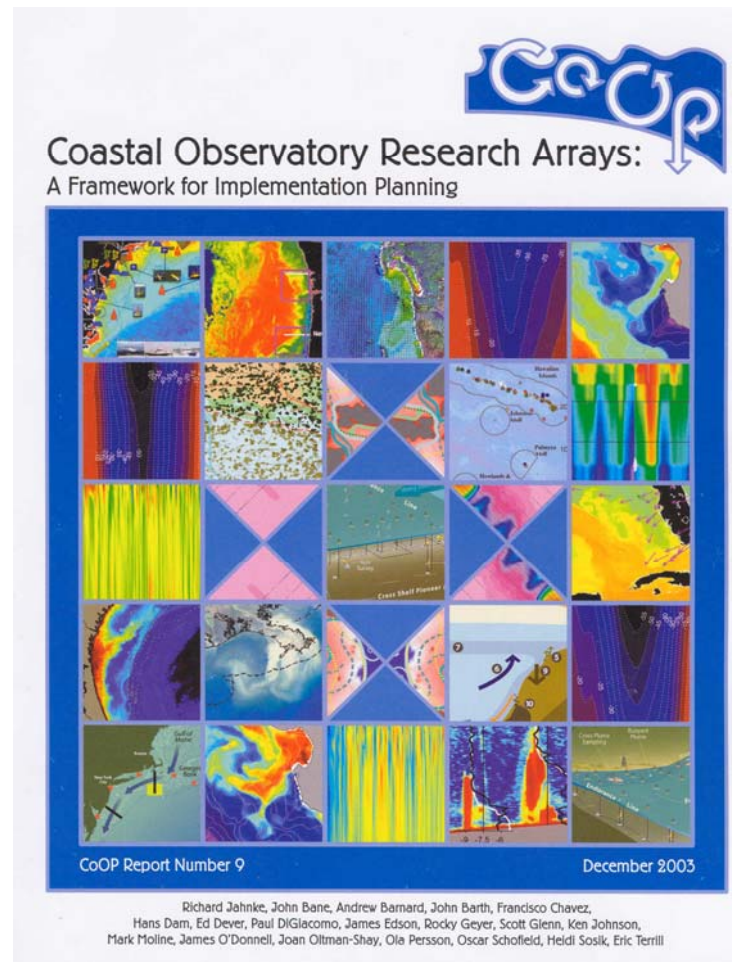
- Coastal ocean processes.
- Turbulent mixing and biophysical interactions.
- Ecosystems dynamics
- 4. Carbon and other biogeochemical cycles.



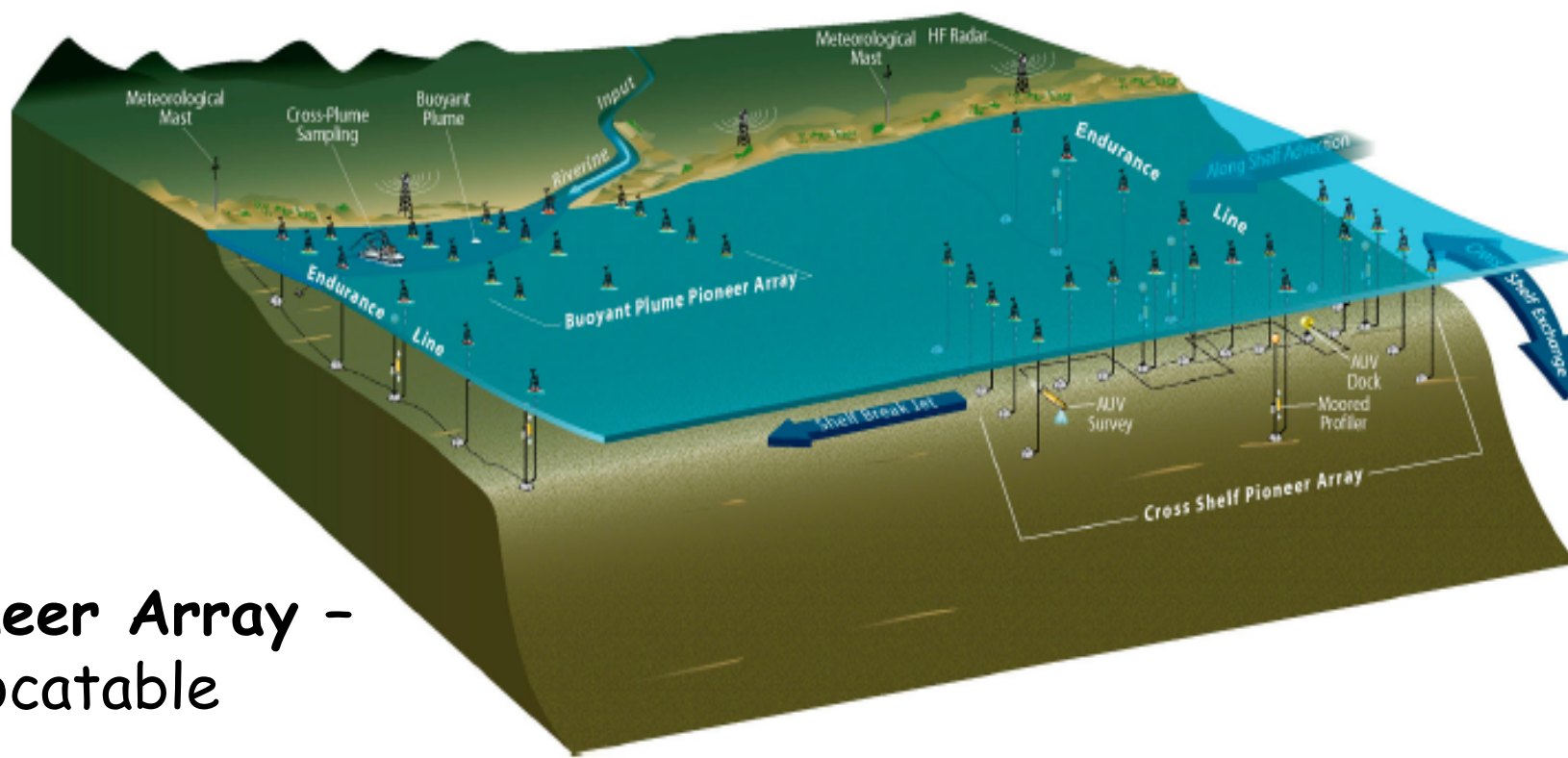
Coastal Observatory Research Arrays: A Framework for Implementation Planning.

Implementation Strategy

1. Fixed, moored and cabled technologies.
 - Mobile Platforms.
 - Remote sensing systems (land, air and space).
- ** Close link and cooperation with IOOS Regional Associations.**



Endurance Arrays - Fixed, permanent observing array arranged as cross-shelf lines and individual moorings



Pioneer Array -
Relocatable

Ocean Color Research Team Meeting

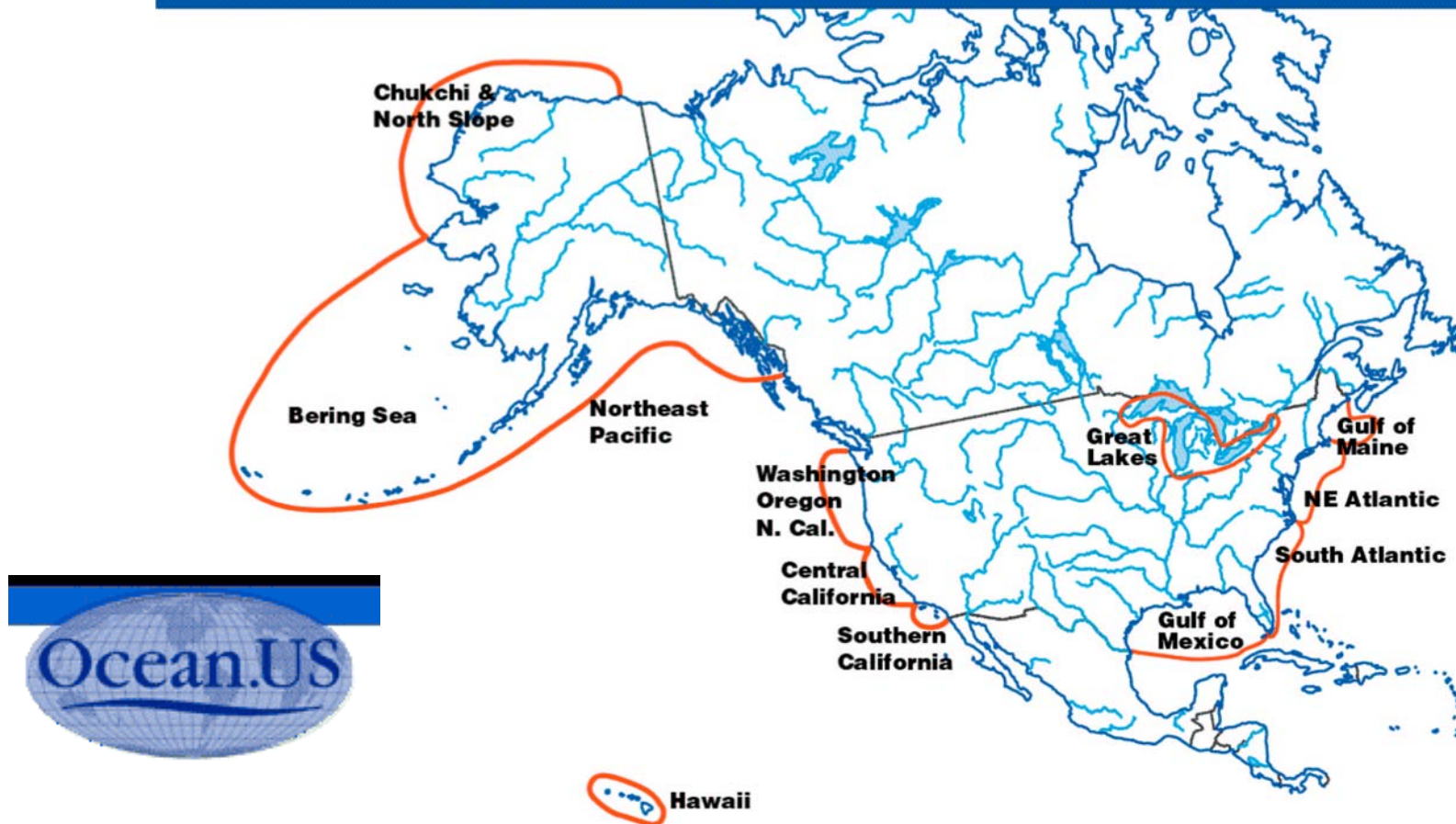
14-16 April 2004
Washington, D.C.



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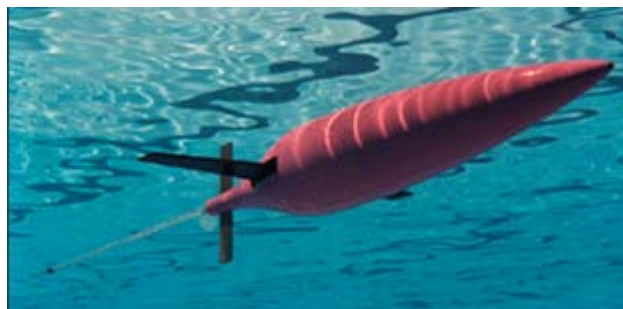
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Possible Regional Observing Systems

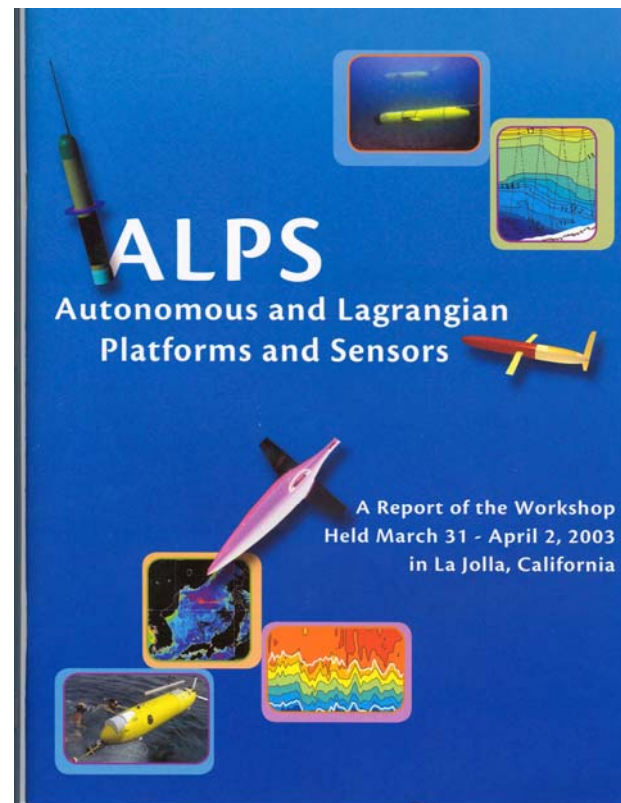
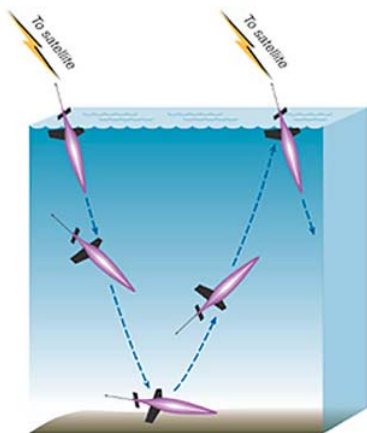


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Gliders



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Ocean Color Research Team Meeting
14-16 April 2004
Washington, D.C.



The Bottom Line: ORION is an excellent opportunity to participate in interdisciplinary coastal ocean science projects in U.S. coastal waters (with NSF, NASA or other funding) and in the process, gain access to long-term platforms and long time series of *in situ* measurements.

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Ocean Color Research Team Meeting

14-16 April 2004
Washington, D.C.



ORION Project Office (CORE/JOI Joint Venture)
based in Washington D.C. **Ken Brink, Project Director.**

ORION Executive Steering Committee (ESC) will provide scientific and technological leadership, lead Science and Project Execution Plan development, and form working groups and committees organized around scientific and technical themes.

ESC Members: Robert Spindel, Chair, (Applied Physics Lab); Jack Barth (OSU); Susan Cook (Harbor Branch); Kendra Daly (USF); John Delaney (UW); Daniel Frye (WHOI); Gregory Jacobs (NRL); Richard Jahnke (Sk.I.O.); Kim Juniper (Universite du Quebec a Montreal); George Luther (UD); Gene Massion (MBARI); Peter Mikhalevsky (SAIC); John Orcutt (Scripps); Oscar Schofield (Rutgers); and Robert Weller (WHOI).

Jim Yoder

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Ocean Color Research Team Meeting
14-16 April 2004
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Possible Next Steps to Develop Closer Links Between NASA-funded Remote Sensing/Bio-optics Community and ORION.

- **NASA HQ supports a science working group to discuss scientific needs and the possibilities for collaboration.**
- 2. NASA HQ and working group engage ORION Project Office and Executive Steering Committee.**
- 3. Anyone can monitor ORION planning process (see CORE webpage: <http://www.coreocean.org>)**

Jim Yoder

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